

## SEQUENCE LISTING

110> Hunter, Tony Kun Ping, Lu

## <120> NIMA INTERACTING PROTEINS

<130> 66671-043

<140> US 10/616,410

<141> 2003-07-08

<150> US 09/275,900

<151> 1999-03-24

<160> 22

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<212> DNA

<213> Homo sapiens

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<221> CDS

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Met Ala Asp Glu Glu Lys Leu Pro Pro

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ggc tgg gag aag cgc atg agc cgc agc tca ggc cga gtg tac tac ttc 99
Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly Arg Val Tyr Tyr Phe
10 20 25

aac cac atc act aac gcc agc cag tgg gag cgg ccc agc ggc aac agc 147
Asn Hiş Ile Thr Asn Ala Ser Gln Trp Glu Arg Pro Ser Gly Asn Ser
30 35 40

agc agt ggt ggc aaa aac ggg cag ggg gag cct gcc agg gtc cgc tgc 195 Ser Ser Gly Gly Lys Asn Gly Gln Gly Glu Pro Ala Arg Val Arg Cys 45 50 55

tcg cac ctg ctg gtg aag cac agc cag tca cgg cgg ccc tcg tcc tgg 243
Ser His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp
60 65 70

cgg cag gag aag atc acc cgg acc aag gag gcc ctg gag ctg atc 291 Arg Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile 75 80 85

	_															
				_	_			_				_		gag Glu		339
_			_		-	-				_	_	_		gga Gly 120	_	387
				_	_				_	_			-	gac Asp	_	435
			_											acg Thr	_	483
	ggc Gly 155									tgag	gggt	aaa s	gagco	ccago	jc	533
ctggcctcgg ggcagggcag ggcggctagg ccggccagct cccccttgcc cgccagccag tggccgaacc ccccactcc tgccaccgtc acacagtatt tattgttccc acaatggctg ggagggggcc cttccagatt gggggccctg gggtccccac tccctgtcca tccccagttg gggctgcgac cgccagattc tcccttaagg aattgacttc agcaggggtg ggaggctccc agacccaggg cagtgtggtg ggaggggtgt tccaaaagaa aggcctggtc acgctcctc gtcagtcg tggaggcaga ctcgagggcc gaattgttc tagttaggcc acgctcctct gtcagtcgc aaaaggtgaac acccagtagg cagccatggg cccttgagc aactgtgcag accctttcac ccccaattaa acccagaacc actaaaaaaa a cccagaacc accagaacc accagaacc actaaaaaaa acccagaaccaggaccg ccccaattaa acccagaaccaggaccg accatggg ccctctgagcaactgtgcag accctttcac ccccaattaa acccagaaccagaaccagaacaaaaaaaaaa														653 713 773 833 893 953		
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Arg	Ser	Ser	Gly 20	Arg	Val	Tyr	Tyr	Phe 25	Asn	His	Ile	Thr	Asn 30	Ala	Ser	
Gln	Trp	Glu 35	Arg	Pro	Ser	Gly	Asn 40	Ser	Ser	Ser	Gly	Gly 45	Lys	Asn	Gly	
Gln	Gly 50	Glu	Pro	Ala	Arg	Val 55	Arg	Cys	Ser	His	Leu 60	Leu	Val	Lys	His	
Ser 65	Gln	Ser	Arg	Arg	Pro 70	Ser	Ser	Trp	Arg	Gln 75	Glu	Lys	Ile	Thr	Arg 80	
	Lys	Glu	Glu	Ala 85	_	Glu	Leu	Ile	Asn 90		Tyr	Ile	Gln	Lys 95		
Lys	Ser	Gly	Glu 100		Asp	Phe	Glu	Ser 105		Ala	Ser	Gln	Phe	Ser	Asp	
Cys	Ser	Ser		Lys	Ala	Arg	Gly		Leu	Gly	Ala	Phe		Arg	Gly	

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115
                            120
Gln Met Gln Lys Pro Phe Glu Asp Ala Ser Phe Ala Leu Arg Thr Gly
                        135
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Glu Met Ser Gly Pro Val Phe Thr Asp Ser Gly Ile His Ile Ile Leu
145
                    150
                                         155
Arg Thr Glu
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gcgcggatcc rggtttcaga ggktyraasa g
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Leu Val Asp Pro Pro Gly Ser Lys Asn Ser Ile Ala Arg Gly Lys Met
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Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly
Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg
Pro Ser Gly Asn Ser Ser Ser
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Thr Gly Leu Pro Thr Pro Trp Thr Val Arg Tyr Ser Lys Ser Lys Lys
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Arg Glu Tyr Phe Phe Asn Pro Glu Thr Lys His Ser Gln Trp Glu Glu
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Pro Glu Gly Thr Asn Lys Asp
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<211> 38
<212> PRT
<213> Homo sapiens
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Val Pro Leu Pro Ala Gly Trp Glu Met Ala Lys Thr Ser Ser Gly Gln
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Arg Tyr Phe Leu Asn His Ile Asp Gln Thr Thr Trp Gln Asp Pro
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Arg Lys Ala Met Leu Ser
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<213> Mus musculus
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Ser Pro Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Val Leu Gly Arg 10

Thr Tyr Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro 20 25

Ser Pro Asp Asp Leu

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<210> 12

<211> 38

<212> PRT

<213> Yeast RSPS

<400> 12

Gly Arg Leu Pro Pro Gly Trp Glu Arg Arg Thr Asp Asn Phe Gly Arg 10

Thr Tyr Tyr Val Asp His Asn Thr Arg Thr Thr Trp Lys Arg Pro 20 25

Thr Leu Asp Gln Thr Glu 35

<210> 13

<211> 38

<212> PRT

<213> Homo sapiens

<400> 13

Thr Ser Val Gln Gly Pro Trp Glu Arg Ala Ile Ser Pro Asn Lys Val

Pro Tyr Tyr Ile Asn His Glu Thr Gln Thr Thr Cys Trp Asp His Pro 20 25

Lys Met Thr Glu Leu Tyr

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<210> 14

<211> 37

<212> PRT

<213> Rattus rattus

<400> 14

Ser Asp Leu Pro Ala Gly Trp Met Arg Val Gln Asp Thr Ser Gly Thr

Tyr Tyr Trp His Ile Pro Thr Gly Thr Thr Gln Trp Glu Pro Pro Gly 20 25

Arg Ala Ser Pro Ser

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  <212> PRT
  <213> Homo sapiens
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  His Leu Leu Val Lys His Ser Gln Ser Arg Pro Ser Ser Trp Arg
  Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn
                                  25
  Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu
  Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu
  Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala Ser
                      70
  Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp Ser
  Gly Ile His Ile Ile Leu Arg Thr Glu
              100
  <210> 17
  <211> 107
  <212> PRT
  <213> Yeast ESS1
· <400> 17
  His Ile Leu Ile Lys His Lys Asp Ser Arg Arg Pro Ala Ser His Arg
                                      10
  Ser Glu Asn Ile Thr Ile Ser Lys Gln Asp Ala Thr Asp Glu Leu Lys
                                  25
  Thr Leu Ile Thr Arg Leu Asp Asp Ser Lys Thr Asn Ser Phe Glu
  Ala Leu Ala Lys Glu Arg Ser Asp Cys Ser Ser Tyr Lys Arg Gly Gly
                          55
  Asp Leu Gly Trp Phe Gly Arg Gly Glu Met Gln Pro Ser Phe Glu Asp
  Ala Ala Phe Gln Leu Lys Val Gly Glu Val Ser Asp Ile Val Glu Ser
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Gly Ser Gly Val His Val Ile Lys Arg Val Gly
100 105

<210> 18

<211> 83

<212> PRT

<213> E. coli

<400> 18

His Ile Leu Val Lys Glu Glu Lys Leu Ala Leu Asp Leu Leu Glu Gln 1 5 10 15

Ile Lys Asn Gly Ala Asp Phe Gly Lys Leu Ala Lys Lys His Ser Ile 20 25 30

Cys Pro Ser Gly Lys Arg Gly Gly Asp Leu Gly Glu Phe Arg Gln Gly 35 40 45

Gln Met Val Pro Ala Phe Asp Lys Val Val Phe Ser Cys Pro Val Leu 50 55 60

Glu Pro Thr Gly Pro Leu His Thr Gln Phe Gly Tyr His Ile Ile Lys 65 70 75 80

Val Leu Tyr

<210> 19

<211> 84

<212> PRT

<213> B.subtilis

<400> 19

His Ile Leu Val Ala Asp Lys Lys Thr Ala Glu Glu Val Glu Lys Lys

1 10 15

Leu Lys Lys Gly Glu Lys Phe Glu Asp Leu Ala Lys Glu Tyr Ser Thr 20 25 30

Asp Ser Ser Ala Ser Lys Gly Gly Asp Leu Gly Trp Phe Ala Lys Glu

Gly Gln Met Asp Glu Thr Phe Ser Lys Ala Ala Phe Lys Leu Lys Thr 50 55 60

Gly Glu Val Ser Asp Pro Val Lys Thr Gln Tyr Gly Tyr His Ile Ile
65 70 75 80

Lys Lys Thr Glu

<210> 20

<211> 91

<212> PRT

<213> C. jejuni

<400> 20

His Ile Leu Val Ala Thr Glu Lys Glu Ala Lys Asp Ile Ile Asn Glu

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Ala Lys Glu Lys Ser Ile Asp Pro Gly Ser Lys Asn Gln Gly Glu 40 Leu Gly Trp Phe Asp Gln Ser Thr Met Val Lys Pro Phe Thr Asp Ala Ala Phe Ala Leu Lys Asn Gly Thr Ile Thr Thr Pro Val Lys Thr Asn Phe Gly Tyr His Val Ile Leu Lys Glu Asn 85 <210> 21 <211> 67 <212> PRT <213> A. thaliana <400> 21 Ile Val Ser Lys Ala Asn Phe Glu Glu Val Ala Thr Arg Val Ser Asp Cys Ser Ser Ala Lys Arg Gly Gly Asp Leu Gly Ser Phe Gly Arg Gly 25 Gln Met Gln Lys Pro Phe Glu Glu Ala Thr Tyr Ala Leu Lys Val Gly 40 Asp Ile Ser Asp Ile Val Asp Thr Asp Ser Gly Val His Ile Ile Lys 55 Arg Thr Glu 65 <210> 22 <211> 45 <212> PRT <213> Artificial Sequence <220> <223> consensus sequence <400> 22 His Ile Leu Val Glu Lys Phe Glu Leu Ala Lys Ser Cys Ser Ser Lys 10 Gly Gly Asp Leu Gly Phe Arg Gly Gln Met Phe Asp Ala Ala Phe Leu

Lys Gly Glu Ser Pro Val Thr Gly Tyr His Ile Ile Lys

40

35